

## **REMARKS**

Claims 1, 3, 4, 7 to 9, and 11 to 13 are now pending in the application. The Examiner is respectfully requested to reconsider the claims and withdraw the rejections in view of Applicant's remarks contained herein.

### **1. REJECTION UNDER 35 U.S.C. §103**

Claims 1, 3, 4, 7 to 9, and 11 to 13 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Hartung et al. (U.S. Pub. App. No. 2003/0150730) in view of O'Connor et al. (U.S. Patent No. 4,496,684) or Gras et al. (U.S. Patent No. 6,479,613). This rejection is respectfully traversed.

Independent claims 1 and 7 include aqueous coating compositions having an uretdione compound comprising a particular structure, as shown. To render these claims prima facie obvious, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). However, in this case, these references are devoid of any teaching or suggestion to make the claimed combination. Only the present invention teaches the claimed combination of features and the desirability of the combination.

Hartung is provided for teaching aqueous, electrodepositable coating compositions, including epoxy resins and uretdione compounds. Hartung lacks disclosure of the presently claimed uretdione compounds. Therefore, the teachings of O'Connor or Gras, which include uretdione compounds allegedly similar to those

claimed, are combined with Hartung to supply the missing uretdione compounds. Such a combination allegedly recreates the present claims. However, this is an impermissible combination, as there is no teaching, suggestion, or motivation provided from which a skilled artisan would make the combination.

***1.1 The references lack any teaching or suggestion to recreate the present claims.***

The references have been impermissibly combined based solely on Applicant's invention as claimed. The fact that the prior art may be modified does not make the modification obvious unless the prior art suggested the desirability of the modification. No such suggestion is found in any of these references and one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780, 1783–84 (Fed. Cir. 1992).

The present invention is the only source teaching and suggesting the claimed aqueous coating compositions having the uretdione compound comprising the particular structure. As described in paragraph [0006], aqueous electrocoating compositions often employ polyisocyanate crosslinkers. These provide strong and desirable urethane linkages but can result in premature gelation of the coating composition. To prevent gelation, the isocyanate groups on the curing agent must be blocked. Previously used blocking compounds are released during cure and can cause deleterious effects on coating properties and can increase organic emissions. The present invention solves these problems by using the particular uretdione compounds, which are self-blocking and

do not release blocking compounds, in an aqueous electrodepositable coating composition.

Thus, even if the respective crosslinking agents from O'Connor or Gras would function as equivalents within Hartung, there is no suggestion as to the desirability to do so. The only nexus by which the combination can be drawn is by using Applicant's claims.

### ***1.2 The references lack any motivation to recreate the present claims.***

The Hartung reference teaches all manner of suitable crosslinking agents including polyisocyanates, dimers thereof, uretdiones, and an extensive listing of suitable blocking agents for blocking isocyanates. Hartung paragraphs [0041] through [0070]. Thus, there is no motivation to use any one crosslinker in favor of another, much less any preference or desirability for using an uretdione based crosslinker.

O'Connor is focused on producing polyurethane oligomers, which contain an uretdione structure. There is no motivation provided as to the desirability of using these polyurethane oligomers in the aqueous coating compositions as found in the present claims. Furthermore, the O'Connor coatings are used instead for woodchip binding to make particle board. Consequently, there is no need to prevent deleterious effects on coating appearance and no motivation to solve premature gelation and/or popping defects due to degassing of blocking compounds.

Gras is focused on solvent-free preparation of polyisocyanates containing uretdiones. The Gras products can be used in powder coatings or organic solvent based stoving enamels, neither of which is similar to the aqueous coating compositions as found in the present claims. Thus, Gras would not motivate the skilled artisan to use the

polyaddition products containing uretdione groups in an aqueous coating composition as found in the present claims.

In sum, the motivation to combine requires desirability of the combination, not merely trade-offs regarding what is feasible. *Winner International Royalty Corp. v. Wang*, 2002 F.3d 1340, 53 USPQ2d 1580 (Fed. Cir.), *cert. denied*, 530 U.S. 1238 (2000). There is no advantage or disadvantage to using different crosslinkers noted in Hartung, and likewise, there is no advantage or disadvantage noted in O'Connor or Gras relating to use of the uretdione compounds in the aqueous coating composition as claimed. Thus, no motivation exists for a skilled artisan to combine these references.

A prima facie case of obviousness cannot stand based on the present combination of references as no suggestion or motivation to make the combination has been identified. Accordingly, Applicant respectfully requests reconsideration of the claims and withdrawal of the rejection.

**CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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